relief object contacting said flexible electrode so that current coupled from said current source to said flexible electrode is strongly coupled through a low resistance path through said variable resistive layer to said electroluminescent device by ridges of said relief object and weakly coupled through a high resistance patent through said variable resistive layer to said electroluminescent device by valleys of said relief object whereby more intense light is generated by areas of said electroluminescent device strongly coupled to said current from said ridges of said relief object and less intense light is generated by areas of said electroluminescent device weakly coupled to said current from valleys of said relief object to form an image of the relief object.

46. The system of Claim 45, wherein said electroluminescent device is an organic electroluminescent device.

47. The system of Claim 45, wherein said electroluminescent device is an inorganic electroluminescent device.

48. The system of Claim 45, further comprising:

a sensor array; and

optical elements interposed between said sensor array and said electroluminescent device, said optical elements for focusing said generated light on said sensor array.

49. The system of Claim 45, further comprising:

a one-to-one sensor array located proximate said electroluminescent device so that said generated light is sensed by said one-to-one sensor array.

50. The system of Claim 48, wherein said sensor array is an integrated circuit.

51. The system of Claim 49, wherein said one-to-one sensor array is amorphous silicon on glass.

52. The system of Claim 47, said inorganic electroluminescent device further comprising:

a transparent electrode layer;

a dielectric layer;

a light emitting layer containing light emitting particles, said light emitting layer being interposed between said transparent electrode and said dielectric layer so that a first

surface of said transparent electrode and a first surface of said dielectric layer are proximate said light emitting layer; and

said current supply source is an alternating current source.

53. The device of Claim 46, said organic electroluminescent device further comprising:

a thin, sublimed molecular film; and

said electrode being a transport anode on which said thin, sublimed molecular film is deposited and to which said one lead of said electrical current source is coupled.

54. The device of Claim 53, said thin, sublimed molecular film being tris(8-quinolinolato) aluminum (III).

55. The device of Claim 46, said organic electroluminescent device further comprising:

a light emitting polymer; and

said electrode being a transparent anode on which said light emitting polymer is deposited and to which said one leaf of said electrical current source is coupled.

56. The device of Claim 55, said light emitting polymer being of the group of poly(p-phenylene vinylene), soluble polythiophene derivatives, or polyanilene.

57. The devices of Claim 55, said transparent anode being comprised of a transparent base substrate coated with indium tin oxide.

58. The device of Claim 55, said current source being a direct current source having one lead coupled to said transparent anode of said organic device and a second lead exposed at a surface of said flexible electrode so that a localized pressure gradient generated by a portion of a relief object contacting said flexible electrode forms a conductive path through said variable resistive layer which corresponds to said localized pressure gradient whereby said current flows from said direct current source and flexible electrode through said variable resistive layer to said transparent anode of said organic electroluminescent device in correspondence with said localized pressure gradient to generate a light image of said relief object.

59. A device for generating an image of a relief object comprising:

a flexible electrode;

a dielectric layer;

a variable resistive layer between said flexible electrode and said dielectric layer, said variable resistive layer being comprised of conductive particles dispersed through a non-conductive medium;

a second electrode;

a light emitting layer between said dielectric layer and said second electrode, said light emitting layer containing light emitting particles, said light emitting layer being interposed between said second electrode and said dielectric layer; and

an electrical current source having first and second leads, said first lead of said electrical current source being coupled to said second electrode and said second lead of said electrical current source being coupled to said flexible electrode so that a localized pressure gradient generated by a portion of a relief object contacting said flexible electrode forms a conductive path through said variable resistive layer which corresponds to said localized pressure gradient whereby said current flows from said flexible electrode through said variable resistive layer, dielectric layer and light emitting particles to said second electrode in correspondence with said localized pressure gradient to generate a light image of said relief object.

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~~60~~ 78. A device for generating an image of a relief object comprising:

a flexible electrode;

a dielectric layer in which light emitting particles are dispersed;

a variable resistive layer between said flexible electrode and said dielectric layer, said variable resistive layer being comprised of conductive particles dispersed through a non-conductive medium;

a second electrode; and

an electrical current source having first and second leads, said first lead of said electrical current source being coupled to said second electrode and said second lead of said electrical current source being coupled to said flexible electrode so that a localized pressure gradient generated by a portion of a relief object contacting said flexible electrode forms a conductive path through said variable resistive layer which corresponds to said localized pressure gradient whereby said current flows from said flexible electrode through said variable resistive layer, dielectric layer and light emitting particles to said

electrode in correspondence with said localized pressure gradient to generate a light image of said relief object.

79 61. A system for generating an image of a relief object comprising:

an electroluminescent device having an electrode and configured as an organic electroluminescent device;

an electrical current source, said electrical current source having one lead coupled to said electrode of said electroluminescent device and a second lead for coupling to a relief object in proximity to said electroluminescent device so that current coupled from said current source to said relief object is strongly coupled to said electroluminescent device by ridges of said relief object and weakly coupled to said electroluminescent device by valleys of said relief object whereby more intense light is generated by areas of said electroluminescent device strongly coupled to said current from said ridges of said relief object and less intense light is generated by areas of said electroluminescent device weakly coupled to said current from valleys of said relief object to form an image of the relief object;

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a variable resistive layer being proximate to said organic electroluminescent device, said variable resistive layer being comprised of conductive particles dispersed through a non-conductive medium;

a flexible electrode that substantially covers a surface of said variable resistive layer; and

said electrical current source being a direct current source having one lead coupled to said electrode of said organic device and a second lead exposed at a surface of said flexible electrode so that a localized pressure gradient generated by a portion of a relief object contacting said flexible electrode forms a conductive path through said variable resistive layer which corresponds to said localized pressure gradient whereby said current flows from said direct current source and flexible electrode through which said variable resistive layer to said electrode of said organic electroluminescent device in correspondence with said localized pressure gradient to generate a light image of said relief object.

80 62. A method for imaging a relief object comprising the steps of:

coupling an electrode of an electroluminescent device to a current source;

contacting a relief object to an exposed surface of said electroluminescent device;

coupling said current source to said relief object so that current flows from said relief object to said electroluminescent device to generate an optical image of said relief object;

locating a variable resistive layer adjacent said exposed surface of said electroluminescent device;

substantially covering said variable resistive layer with a flexible electrode; and

coupling said current source to said flexible electrode rather than said relief object so that said contacting step contacts said relief object with said flexible electrode so that pressure from ridges and valleys of said relief object generate relatively low and high resistance conductive paths through said variable resistive layer whereby said current from said current source is provided through said variable resistive layer at different magnitudes correspondence to said ridges and valleys of said relief object and said different currents cause said electroluminescent device to generate said image of said relief object.

63. A system for generating an image of a relief object comprising:

an electroluminescent device having a transparent electrode layer and a dielectric layer receiving dispersed light emitting particles and substantially covering said transparent electrode layer; and

an electrical current source, said electrical current source having one lead coupled to said electrode of said electroluminescent device and a second lead for coupling to a relief object in proximity to said electroluminescent device so that current coupled from said current source to said relief object is strongly coupled to said electroluminescent device by ridges of said relief object and weakly coupled to said electroluminescent device by valleys of said relief object whereby more intense light is generated by areas of said electroluminescent device strongly coupled to said current from said ridges of said relief object and less intense light is generated by areas of said electroluminescent device weakly coupled to said current from valleys of said relief object to form an image of the relief object.

64. The system of Claim 63, wherein said light emitting particles are phosphor particles.

65. The system of Claim 63, wherein said transparent electrode layer is one of indium tin oxide and zinc oxide aluminum.

66. The system of Claim 63, wherein a surface of said electroluminescent device is concave to facilitate placement of a rounded relief object against said electroluminescent device.

67. The system of Claim 63, further comprising:

a sensor array; and

optical elements interposed between said sensor array and said electroluminescent device, said optical elements for focusing said generated light on said sensor array.

68. The system of Claim 63, further comprising:

a one-to-one sensor array located proximate said electroluminescent device so that said generated light is sensed by said one-to-one sensor array.

69. The system of Claim 67, wherein said sensor is an integrated circuit.

70. The system of Claim 68, wherein said one-to-one sensor array is amorphous silicon on glass.

71. A system for generating an image of a relief object comprising:

an organic electroluminescent device having a transparent electrode as an anode, said transparent anode having a thin, sublimed molecular film deposited thereon; and

an electrical current source, said electrical current source having one lead coupled to said transparent anode of said electroluminescent device and a second lead for coupling to a relief object in proximity to said electroluminescent device so that current coupled from said current source to said relief object is strongly coupled to said electroluminescent device by ridges of said relief object and weakly coupled to said electroluminescent device by valleys of said relief object whereby more intense light is generated by areas of said electroluminescent device strongly coupled to said current from said ridges of said relief object and less intense light is generated by areas of said electroluminescent device weakly coupled to said current from valleys of said relief object to form an image of the relief object.